

**REMARKS**

Claims 20-62 currently appear in this application. The Office Action of April 17, 2007, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

**Allowable Subject Matter**

It is noted with appreciation that claims 20-48 are allowed.

**Interview Summary**

Applicant's attorney wishes to thank Examiner Bowman for the courtesies extended during the telephone interview of July 30, 2007. During that interview, the scope of enablement of the claims was discussed. Examiner Bowman's position is that claims reciting that the DNzyme is delivered directly to the cell are too vague and there are no examples of such delivery. However, Examiner Bowman noted that the preferred method is topical application, disclosed at page 11, lines 24-28, and Examiner Bowman stated that she would allow claims to topical application of the DNzyme. Additionally, Example 6 on page 31 states that the DNzyme was applied with a catheter.

Sequence Compliance

Submitted herewith is a sequence listing for the sequences shown in Figure 1, ED5 and ED5SCR, the scrambled control.

Applicants have added into the present specification a substitute paper copy Sequence Listing section according to 37 C.F.R. §1.821(c). Furthermore, attached hereto is a file (either on a 3½" disk or in an online text file) containing the "Sequence Listing" in computer readable form in accordance with 37 C.F.R. §1.821(e).

Applicants have amended the specification to insert SEQ ID NOs:21, 22 and 23 into the Brief Description of the Figures Section for Figure 1, as supported in the present specification.

The following statement is provided to meet the requirements of 37 C.F.R. §1.825(a) and 1.825(b).

I hereby state, in accordance with 37 C.F.R. §1.825(a), that the amendments included in the substitute sheets of the sequence listing are believed to be supported in the application as filed and that the substitute sheets of the sequence listing are not believed to include new matter.

I hereby further state, in accordance with 37 C.F.R. §1.825(b), that the attached copy of the computer readable form is the same as the attached substitute paper copy of the sequence listing.

Under U.S. rules, each sequence must be classified in <213> as an "Artificial Sequence", a sequence of "Unknown" origin, or a sequence originating in a particular organism, identified by its scientific name.

Neither the rules nor the MPEP clarify the nature of the relationship which must exist between a listed sequence and an organism for that organism to be identified as the origin of the sequence under <213>.

Hence, counsel may choose to identify a listed sequence as associated with a particular organism even though that sequence does not occur in nature by itself in that organism (it may be, e.g., an epitopic fragment of a naturally occurring protein, or a cDNA of a naturally occurring mRNA, or even a substitution mutant of a naturally occurring sequence). Hence, the identification of an organism in <213> should not be construed as an admission that the sequence *per se* occurs in nature in said organism.

Similarly, designation of a sequence as "artificial" should not be construed as a representation that the sequence has no association with any organism. For example, a primer or probe may be designated as "artificial" even though it is necessarily complementary to some target sequence, which may occur in nature. Or an "artificial" sequence may be a substitution mutant of a natural sequence, or a chimera of two or more natural sequences, or a cDNA (i.e., intron-free sequence) corresponding to an intron-containing gene, or otherwise a fragment of a natural sequence.

The Examiner should be able to judge the relationship of the enumerated sequences to natural sequences by giving full consideration to the specification, the art cited therein, any further art cited in an IDS, and the results of his or her sequence search against a database containing known natural sequences.

Applicants submit that the present application contains patentable subject matter and therefore urge the examiner to pass the case to issuance.

**Rejections under 35 U.S.C. 112**

Claims 49-58 are rejected under 35 U.S.C. 112, first paragraph, because the specification is said to be enabling only for DNAzyme-mediated inhibition of EGR-1 expression *in vitro*.

This rejection is respectfully traversed. Claims 49, 52 and 55 have been amended to recite that the DNAzyme is applied topically. Support for this amendment can be found in the specification s filed at page 11, lines 24-28. This is the preferred method for applying the DNAzyme.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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